



Saskatchewan
Agriculture, Food
and Rural
Revitalization

ADF

AGRICULTURE DEVELOPMENT FUND

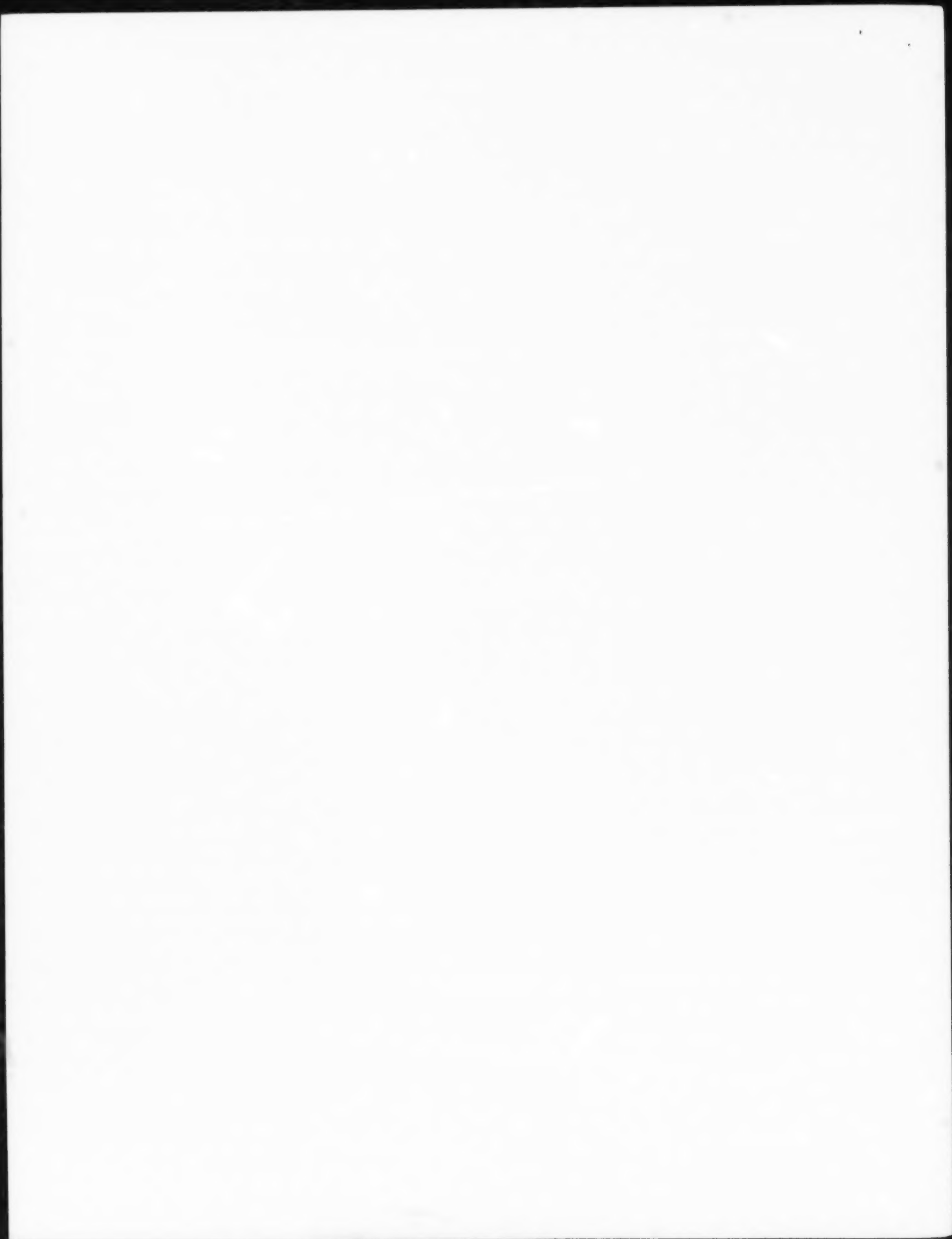
FINAL REPORT

20020262

**APPLIED RESEARCH AND INDUSTRY
DEVELOPMENT**

**Funded by:
The Agriculture Development Fund**

**March, 2004
Prepared by: East Central Research Foundation**



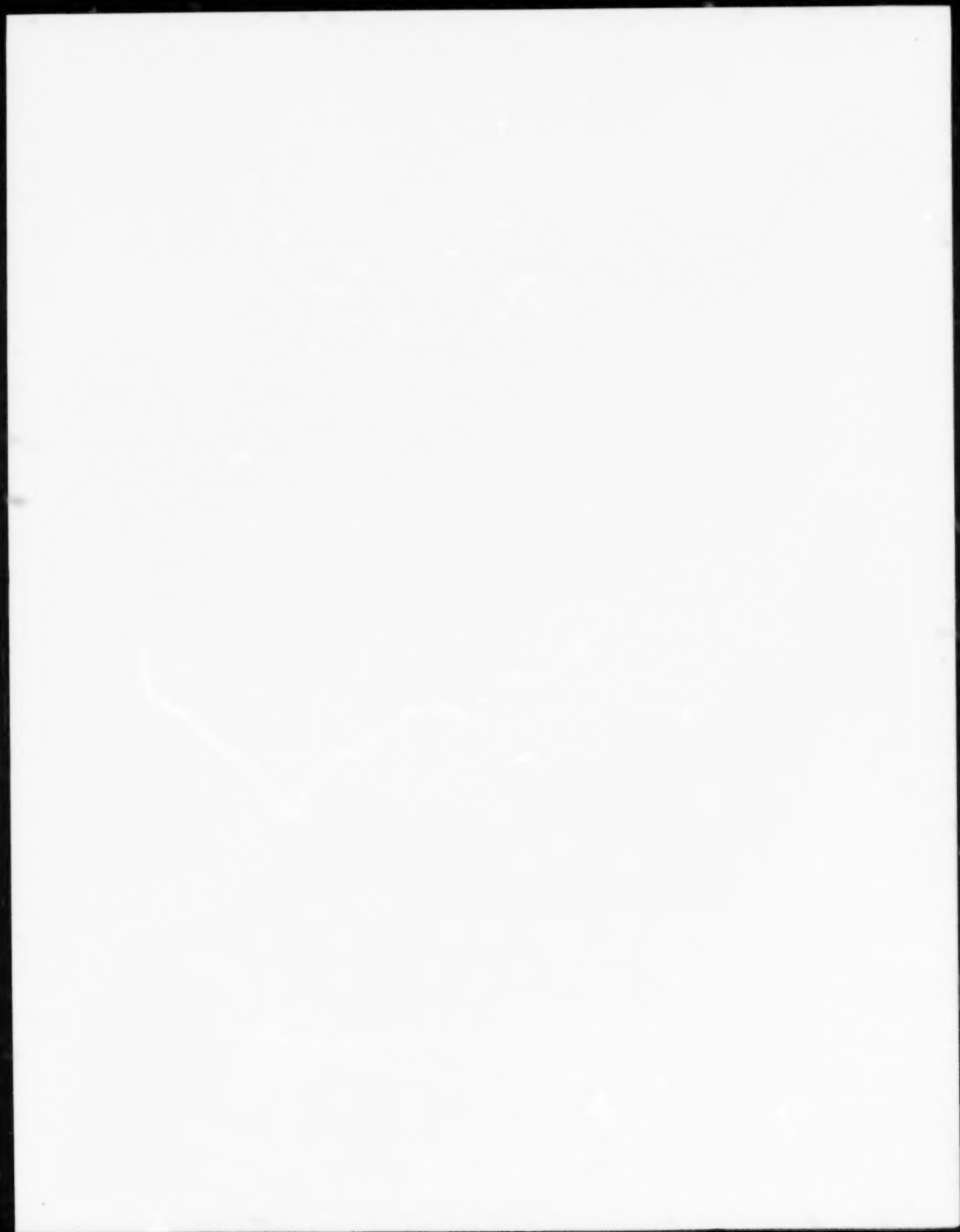
FINAL REPORT - 2003

APPLIED RESEARCH AND INDUSTRY DEVELOPMENT
Project 2002-262

EAST CENTRAL RESEARCH FOUNDATION
CANORA, SK

K.B. Stonehouse – Research farm manager

March 2, 2004



PROJECT SUMMARY

The deployment and commercialization of applied crop and forage research that creates value for producers is predicated on the ability to demonstrate the advantages of the new technologies, production practices and adapt these technologies to local conditions. Agri-ARM represents SAFRR's commitment to ensuring production technologies and practices developed for Saskatchewan are appropriately evaluated, adapted, and adopted by Saskatchewan producers. This work is completed through eight regional applied research and demonstration sites that function collaboratively as a network sharing expertise, knowledge and infrastructure. Each site is also guided by a local producer group who sets and directs research priorities important to the region of the local site.

The broad goals and objectives of the Agri-ARM program include:

- Increase the adoption of new agricultural production technologies and practices;
- Improve decision-making capacity for more environmentally sound and economically viable on-farm options;
- Develop and maintain an adequate level of infrastructure and expertise for regional applied research and demonstration;
- Increase public awareness of agriculture's role in environmental stewardship and the overall economy.
- Add value to agricultural practices by developing new crops, increase production and production efficiency.

Agri-ARM has been in existence for only two years; however the benefits of the program are already being demonstrated in the partner organizations with whom they collaborate. Agri-ARM sites have working agreements with the University of Saskatchewan, AAFC, CARDS, PFRA, numerous producer groups and Industry representatives. Through providing consistent and continued support, SAFRR is providing a focal point for crop and forage research in the Province between academia, Government and NGO research institutions, industry and producer groups to share in the limited research capacity of the Province. Meanwhile, the autonomous nature of each site also ensures that this research capacity is fully utilized to its best and most appropriate use for its region. It is through this structure that the program will fulfill its objective to increase the value of crop production beyond the farm gate and improve agricultural sustainability.

BENEFITS TO AGRICULTURE

The primary objective of the Agri-ARM program is to increase the value of agricultural production beyond the farm gate for Saskatchewan. Through Agri-ARM's innovative structure and function, this goal has been embraced and reaffirmed by the sites, their producer organizations, and partner organizations. The types of research and demonstration undertaken at the site will work to increase the value of crops through expanding the production of higher valued crops, more efficient production of crops currently grown, the evaluation of cost saving technologies, and expansion of farm management decision making capacity by Saskatchewan producers.

The program's structure requires producer involvement at the ground level, resulting in a great breadth of research addressing problems arising in their operations that are typically not addressed in mainstream agriculture research. This characteristic gives the local boards ownership and commitment to the research undertaken by the farm, while also forcing the farm to be accountable to the producers in the types and scope of research conducted.

Investigation is also conducted in new opportunities for the agriculture sector and directly participates in the effort to develop industry where opportunities have been identified. Some examples of these include; Strawberry Crown Adaptation, Adding Value to Oilseed Flax Production with Fiber Agronomy, Stool-bed hybrid poplar production demonstration, Pesticide-Free Production, diversified fruit production and lower costs of production of Chickpeas.

The farms aim to help producers sustain economic yields of the main commodities through development of new, fine-tuned agronomics and continual evaluation of new industry products. Agri-ARM and its farms are also providing leadership in the promotion of environmental sustainable production through numerous projects and collaboration with Industry.

PROJECTS AT ECRF FOR 2003

East Central Research Foundation conducted 37 trials and demonstration projects in 2003. Each are listed here.

1. Winter wheat seeded on ann forage stubble trial
2. Grass seed production demonstration
3. Perennial forage demonstration
4. Kura clover demonstration
5. Indian cup plant demonstration
6. Annual forage trial
7. Sprayer/swather demonstration
8. Saskatchewan Forage Council annual forage trial
9. Nitrogen timing in dry bean
10. Dow AgroSciences canola trial
11. Cargill IMC canola variety trial
12. Canadian Wheat Board winter wheat variety trial
13. Saskatchewan Soil Conservation Association winter wheat agronomy trial
14. Saskatchewan Forage Council perennial forage trial
15. Saskatchewan Forage Council 2002 perennial forage trial
16. Biolin research fibre flax large plot trial
17. Agroforestry/shelterbelt orchard
18. University of Saskatchewan barley trials
19. University of Saskatchewan oat trials
20. University of Saskatchewan wheat trials
21. Alpine liquid fertilizer trial

22. Gustafson barley seed treatment trial
23. Agriculture and Agri-Food Canada sunflower trial
24. Canaryseed variety trial
25. Fibre flax variety trial
26. Field pea seeding depth trial
27. Biolin research fibre flax small plot trial
28. Extra fibre flax variety trial
29. Fibre flax agronomy trial
30. Fibre flax retting trial
31. University of Saskatchewan pulse variety trial
32. Turnip demo
33. Alfalfa demo
34. Saskatchewan Soil Conservation Association greenhouse gas mitigation trials
35. Prairie Agricultural Machinery Institute hog manure trial
36. Wheat regional variety trials
37. Flax, barley and oat regional variety trials

EXTENT OF INDUSTRY AND TECHNICAL SUPPORT FOR ECRF

The following individuals and organizations have contributed to this project:

AgriARM Coordinator	Jody McConnell
Research Farm Manager	Kim Stonehouse
Research Technition	Randy Danyluk
Summer Student	Danielle Hrywkiw
Industry, Government and Institutional Support	Agriculture and Agri-Food Canada Alpine Plant Foods Corporation Biolin Reseach Canadian Wheat Board Cargill Specialty Canola Oils Dow Agrosiences Canada Gustafson Prairie Agricultural Machinery Institute Provincial Council of Agriculture Development and Diversification ADD Boards for Saskatchewan Saskatchewan Agriculture Food and Rural Revitalization Saskatchewan Forage Council Saskatchewan Soil Conservation Association Saskatchewan Wheat Pool Winter Cereals Canada University of Saskatchewan

TECHNOLOGY TRANSFER

Technology transfer was achieved through numerous field days during the growing season supplemented by extension meetings, producer conferences, newsletters, annual reports and website postings. During the last growing season 2300 people attended field days and 1200 producers attended meetings and conferences where research conducted at Agri-ARM sites were presented. Site managers also participated and presented at numerous industry events including the Crop Production Show, Soils and Crops, SSCA Direct Seeding conference, Agribition, Regional Pulse meetings and many local extension events in their regions. Research was also included in numerous newsletters and reports throughout the Province.